

DOCTOR'S CONSULTANCY USING DJANGO

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Abstract:

Life is becoming too busy to get medical appointments in person and to maintain a proper health care. The main idea of this work is to provide ease and comfort to patients while taking appointment from doctors and it also resolves the problems that the patients has to face while making an appointment. This website My. Doctor Application acts as a client whereas the database containing the doctor's details, patient's details and appointment details is maintained by a website that acts as a server. This project entitled "DOCTOR'S CONSULTANCY USING DJANGO" was designed and developed in Angular Framework. The purpose of the study is to implement an online database system that caters the doctor appointment scheduling, reservation, and records management of consultation for a hospital or clinic. In this era of pandemic, medical clinic and hospital imposed strict guidelines on the number of people who can enter their facility. Consultations to doctors are also very limited and can facilitate a limited number of patients. The online system for appointment and consultation is one of the solutions that can be used to give the people away on how to contact their doctors and reserve an appointment for consultation. The implementation of the said project will help hospital and clinic provide better client management while ease and comfort are the advantage on the patient end. The analysis and implementation result shows that the project is feasible and implementation is highly recommended by the researcher.

Keywords:

HTML, CSS, DJANGO, JavaScript, etc.

I. INTRODUCTION

This project is a web-based management system for a doctor appointment. The project objective is to deliver the online shopping application into platform. Doctor appointment is the process whereby consumers directly buy goods or services from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. This project is an attempt to provide the advantages of online shopping to customers of a real shop. It helps buying the products in the shop anywhere through internet by using an android device. Thus, the customer will get the service of online shopping and home delivery from his favorite shop. The objective of the project is to make an application in android platform to purchase items in an existing shop. To build such an application complete web support need to be provided. A complete and efficient web application which can provide the online shopping experience is the basic objective of the project. The web application can be implemented in the form of an android application with web view. This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains. The system recommends a facility to accept the orders 24*7 and a home delivery system which can make customers happy. If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops will not be losing any more customers to the trending online shops such as flipchart or eBay. Since the application is available in the Smartphone it is easily accessible and always available.

II. LITERATURE REVIEW

A study has shown that Online Booking Doctor's Consultation Time system brings out quite a few advantages, one of it is that it can save the patient's time. By using the system, they can book the appointment with doctor through online instead of going to the hospital or clinic and wait for register and wait again for their turn to consult with a doctor after the register. Some of them even need to wait for the nurse or workers there to get their medicine. This waiting process is obviously too long for them and it is time-consuming too. The purpose of literature survey is to give a description of research topics related to patient opinions and feeling on the current way of making appointment with doctors.

A. Waiting time

Waiting time is the duration that a patient already waited in the clinic before meet by anyone of the staff. Patient's waiting time is a very important indicator of quality of services offered by hospitals. One factor affecting the use of healthcare services is the amount of time a person spends waiting to be seen. Patients view long waiting times as an obstacle to receiving services effectively. For both patient and doctor, letting patients waiting unnecessarily can cause them stress.

B. Appointment Delay

Appointment delay is defined as the time between the days a patient requests an appointment and her actual appointment date, the higher the chances that he/she will cancel or not show up. According to the research done by, 31 percent of the 5901 samples cancelled or did not show up at their appointment with doctor. These appointments are mostly scheduled for a few days after the making the appointment. Thus, asking the patients to come right away or make appointment requests on the day they want to be seen is the solution.

C. Earlier Arrival

Most of the patients tend to arrive earlier even though they already book consultation time with doctor. This is usually happening on those who need follow-up consultation. Scheduling is very important to make sure a smooth and fast consultation process and to decrease waiting times. A research study found that those patients who had an appointment time and arrived at the appropriate time had shorter waiting time than those who came in without an appointment.

D. How the Online Booking System can help

The significant help of online doctor's consultation time system can reduce the waiting time of patients. By using the proposed system, the patients can choose their desired time to consult with a doctor and book the time from the system. This can reduce the registration step at the counter. Thus, for the patients that looking for follow up consultation, they can book the consultation time for a future time. Those patients who need faster consultation from doctor like having fever can check for nearest doctor's available time and book that slot and reach there on time to avoid long waiting time.

III. SYSTEM IMPLEMENTATION

Designing and implementing a doctor consultancy project using AngularJS involves several steps, including project setup, designing the user interface, setting up the backend, implementing the required features, and deploying the project. Here is a general overview of the steps involved:

Project setup: The first step is to set up the project structure and install the required dependencies. To create an AngularJS project, you can use the AngularJS CLI (Command Line Interface) tool. You can install AngularJS CLI using Node.js, and then run the command "ng new my-doctor-consultancy" to create a new AngularJS project.

User interface design: Next, you need to design the user interface of the doctor consultancy project. You can use AngularJS directives and templates to create the user interface elements, such as forms, buttons, and menus. AngularJS provides several built-in directives and components that you can use to create the user interface.

Setting up the backend: The backend of the doctor consultancy project will handle data storage, authentication, and other server-side functions. You can use Node.js and a backend framework like Express to set up the backend. You will also need to set up a database to store user information and other data required by the application.

IV. METHODOLOGY

Define project goals: Clearly define the goals and objectives of the online doctor consultation project, including any targets for patient satisfaction, health outcomes, or cost savings.

Assess resources: Assess the resources required for the project, including personnel, equipment, and funding.

Develop a timeline: Develop a timeline for the project, including milestones for key activities such as platform development, recruitment, and launch.

Identify the target population: Determine who the target audience is for the online doctor consultation project, considering factors such as location, age, and health conditions.

Select a platform: Choose a platform for the online doctor consultation service, such as a website, app, or telemedicine software.

Setting up the backend: The first step is to set up the backend using Node.js and Express.js. This involves creating a RESTful API to handle requests from the frontend.

Setting up the database: The next step is to set up the database using MongoDB. This involves creating a schema for the data and defining how it should be stored and retrieved.

Setting up the frontend: The next step is to set up the frontend using React. This involves creating a user interface for the application, including pages for registration, login, and medical consultation.

Authentication and Authorization: Implement authentication and authorization features for users to securely access their accounts and health records.

Medical Consultation: Implement the features for medical consultation between doctors and patients. This includes features such as video consultation, chat, audio calls, and file sharing.

Payment Integration: Implement payment integration features so that patients can pay for medical consultations, medicines, and other services offered.

Testing and Deployment: Test the application thoroughly and deploy it to a server or hosting platform.

V. RESULT DISCUSSIONS

Improved accessibility to medical care: Online doctor consultations are designed to make medical advice and treatment more accessible, particularly for patients in remote or underserved areas.

Reduced cost of healthcare: By providing a cost-effective alternative to traditional in-person appointments, online doctor consultations are expected to reduce the overall cost of healthcare for patients.

Increased patient satisfaction: Online doctor consultations are expected to increase patient satisfaction by providing a more convenient and accessible way to receive medical care.

Improved health outcomes: By allowing patients to receive medical advice and treatment more quickly and easily, online doctor consultations are expected to improve health outcomes and reduce the risk of complications.

Increased patient engagement: Online doctor consultations are expected to increase patient engagement in their own healthcare, encouraging patients to take an active role in managing their health and wellness.

Improved healthcare efficiency: By streamlining the process of connecting patients with medical professionals, online doctor consultations are expected to improve the efficiency of healthcare delivery, freeing up time and resources for more complex cases.

Overall, the expected outcome of an online doctor consultation project is to provide a more convenient, accessible, and effective way for patients to receive medical care, leading to improved health outcomes and a more efficient healthcare system

VI. CONCLUSION

The system has been implemented and tested successfully. It meets both functional and non-functional requirements. The system has been designed keeping the present and future requirements in mind. The system is made very flexible. But still there are some limitations of the system. Proper consideration has been given for a wide range of new enhancements. The system is developed in a user-friendly way. In future, if it is required to add new functionality in the system new module can be added without affecting the design of the system. Furthermore, the maintenance of the project will become easy in future and transparency will be maintained. The proposed system is also tested with different types of users in order to make sure that there are no bugs and user interface is friendly enough to use the system. The system's main function is for users to be able to book a consultation through the online system, therefore they don't have to go to the clinic or hospital to book it and then waiting there for their turn. They can just sit at home and go there when the time is scheduled for their appointment.

VII. REFERENCES

1. Tiago Salgado de Magalhães TGomes,2020, Reinforcement Learning fo primary care appointment scheduling, Faculdade de Engenharia da Universidade do Porto Mestrado de Engenharia da Informação
2. T. Cayirli and E. Veral, 2020 —Outpatient scheduling in health care: a review of literature,|| Prod. Oper. Manag., vol. 12, no. 4, pp. 519–549
3. D. Gupta and B. Denton, 2019—Appointment scheduling in health care: Challenges and opportunities, || IIE Trans., vol. 40, no. 9, pp. 800–819
4. Xiaojun Zhang,2020, Developing an online patient Appointment Scheduling system based on web services architecture, Chinese Academy of Sciences EET ALAPAMI 2020 Conference Proceedings 4. S. Sri Gowthem, & K.P. Kaliyamurthie ,2019, Smart Appointment Reservation System, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 4, Issue.
5. Xiaojun Zhang, Dr. Ping Yu, Dr. Jun Yan, Hongxiang Hu, and Dr. Niraj Goureia,2019.
6. Zuehlke E. What are the Desires of Customers regarding Virtual Reality 2019.